

Lawyers' Office

DAVID, LIENERT & RAMER

Draft of

3rd May 1985 LD/s

To the

Commercial Court of the Canton of Zurich

P.O. Box

8023 Zurich

In the matter of

Fabriques des Tabac Réunies S.A., Quai Jeanrenaud 3,  
2003 Neuchâtel,

Plaintiff,

represented by Dr. Lucas David,

Bahnhofstr. 58, 8001 Zurich,

versus

Brown & Williamson, Tobacco Corporation, 1500 Brown &  
Williamson Tower, Louisville, Kentucky, USA,

Defendant,

represented by Dr. Ing. Hans A. Troesch and Dipl. Ing.

Jacques J. Troesch, Patent Agent, Walchestr. 19,

8006 Zurich,

concerning revocation of a patent

I hereby enter an

action

in the name of and with the authority of the Plaintiff,  
with the petition:

That the Swiss/Liechtenstein Patent No. 645,252  
relating to a cigarette filter, applied for on 3rd  
April 1980 and granted on 28th September 1984, be  
revoked by the court

with costs and damages against the Defendant."

Value in litigation: approx. SF 20 million

Annex 1: Plaintiff's power of attorney, undated

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Grounds:

1. Preliminary remarks

1. The burden of proof lying with the Plaintiff, legally sufficient proof is submitted in respect of the entire statement of facts, with the proviso that individual items of evidence may be reserved until a later date (§ 141, Code of Civil Procedure).
2. The undersigned lawyer is duly authorised to act (cf. I II).
3. The jurisdiction as the result of the application to the court is justified in accordance with Article 75, Section 1, Clause b of the Patent Act.  
The defendant has no residence in Switzerland. The Defendant's patent agent, as entered in the Register, has his place of business in Zurich, so that the Zurich judge has jurisdiction. The Commercial Court has jurisdiction for actions under patent law, without recourse to the justice of the peace (§ 61, Section 1, Clause 1 of the Judiciary Act, § 103, Clause 1 of the Code of Civil Procedure).

Evidence submitted:

Annex 2: Extract from Register of Patents 4645,252, -  
dated 13th February 1985

4. The revenue from the tobacco tax in the year 1984 was SF 789 million. This corresponds to tobacco sales of approx. SF 1,900 million or approx. 16,000 million units. The market share of the Barclay cigarette produced by the Defendant is probably between 5 and 6% (1983 3.4%, 1984 4.7%), or approx. SF. 100 million or 800 million units per year. Given that the patent in dispute has a residual period of validity of 15 years, this corresponds to a sale of approx. 1,500 million. Since, as a rule of thumb, a patent corresponds to approximately 5% of the net sales value of the patented article, the Plaintiff estimates the value in litigation of the disputed patent at approx. SF 20 million.
2. On the facts of the case in general
  5. The parties are competitors in the cigarette industry. ...  
The Defendant, a member of the British-American Tobacco

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Group (BAT), manufactures the cigarette Barclay, which has been on sale in Switzerland since about October 1983. The Barclay cigarette is a filter cigarette which has subsidiary air passages through which the smoker is supposed to draw in fresh air. This fresh air is intended to dilute, within the oral cavity, the main stream of smoke which is drawn in, and thus to reduce the relative nicotine and tar levels. The methods of measurement by which these levels were ascertained have already given rise to legal action in Switzerland and elsewhere, but these proceedings are of no further relevance in the present context.

6. The Defendant applied for a patent for the Barclay cigarette under No. 2656/80 on 3rd April 1980, an American priority of 11th April 1979 being claimed for this patent. The application resulted, on 28th September 1984, in Swiss/Liechtenstein Patent No. 645,252. In essence, this claims a filter for a cigarette, characterised by a porous filter rod (2) of cylindrical shape, a non-porous wrapping sheet (12), which extends along the rod (2) and wraps the latter, whose ends are left open to allow free flow, the wrapping sheet (12) and the rod (2) possessing a plurality of longitudinally extending, peripherally distributed, mutually spaced grooves (14), which grooves (14) extend over a certain length from at least one end, and further characterised by tip material (16), which extends in the longitudinal direction and envelops the wrapping sheet (12), this tip material (16) being permeable to air, which makes it possible for the ventilation air to flow through the tip material into the grooves, this air being the only fluid which flows through these grooves when a smoker draws normally on a cigarette fitted with this filter.

The intention of this is to enable the cigarette filter to combine the pressure drop of a normal cigarette with filters of low to moderate effectiveness, and to reduce the specific tar content in the smoke by ventilation instead of filtration (patent specification page 2, right-hand column, lines 40-43). An opinion on this

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stated object is given on page 12 below.

Evidence submitted:

Annex 3: Patent Specification +645,252

7. Consequently, characterising elements of the patented cigarette filter according to Swiss Patent Specification 645,252 are
- a) a porous filter rod (2) of cylindrical shape, also referred to in the patent specification as a filter element (10, 20, 30, 40);
  - b) a non-porous wrapping sheet (12; 22, 32, 42), which extends along the rod (2) and wraps the latter, but leaves the ends thereof open for free flow;
  - c) a plurality of longitudinally extending and peripherally distributed, mutually spaced grooves (14; 24, 34b, 44a) possessed by the wrapping sheet (12) and the rod (2), which extend over a certain length starting from at least one end,
  - d) a tip material (16), also referred to as tip paper in the patent specification, which extends in the longitudinal direction and envelops the wrapping sheet (12), this tip material (16) being permeable to air, which makes it possible for the ventilation air to flow through the tip material into the grooves;
  - e) the stated effect, according to which this air is the only fluid which flows through these grooves when a smoker draws normally on a cigarette fitted with this filter.
- Further claims envisage
- aa) that the grooves (14) starting from at least one end of the filter rod (2) are open at this end (Claim 2);
  - bb) that the grooves (14) extend over a length which is less than the length of the filter rod (2) (Claim 2);
  - cc) that the tip material (16) possesses perforations (18; 48) which are connected for the purposes of flow with the grooves (14; 44a, 44b) (Claims 2 and 4);
  - dd) that the tip material (16) is permeable to air and preferably in sheet form (Claim 3);
  - ee) that the grooves (14; 24; 34a; 44a, 44b) are arranged in particular geometric manner (Claims 5-7, 9, and 10);

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- ff) that the wrapping sheet (12) which is non-porous for smoke and the porous filter rod (2) consist of a single piece (Claim 8);
- gg) cigarettes fitted with a cigarette filter of this type (Claims 9 and 10).

3. On the question of disclosure

8. The description of the invention is an essential constituent both of the patent application and of the patent specification (Article 49, Section 2, Clause b, 51 Section 3, 63 Section 2 Patents Act, Article 26 Patent Rules). Thus, it cannot be a matter for the Applicant's discretion whether or not he will attach a description to his patent claims or what that description is to contain. The latter is also clear from Article 26, Section 5, Patent Rules, according to which the description must contain at least one exemplary embodiment of the invention. Hence the description must contain complete and clear details of the invention claimed (cf. Blum/Pedrazzini, Swiss Patent Law, No. 5b on Article 50, Patents Act), for which reason everything which is necessary for implementation of the patent applied for must be incorporated into the description. The description of the patent in dispute fails, in more than one respect, to comply with this self-evident requirement for disclosure.
9. In Patent Claim 1, Line 13, it is stated "that the tip material 16 is permeable to air". The corresponding wording is also found in Patent Claim 3. This wording is not covered by the description of the exemplary embodiments. All that is stated at that point is that perforations are provided in the so-called tip material 16. Porosities can be permeable to air, and this can probably also be inferred from the description of the figures, but permeability to air is not always necessarily caused by porosities. The Applicant itself has acknowledged this distinction and in fact has even emphasised it in Claim 4.

The last feature of Claim 1, Lines 15 to 18, is a statement of effect for which no support can be found in the description. In this context, all that is stated

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in the description, on page 3 of the patent specification, right-hand column, lines 16 to 19, is:

"During smoking, the ventilation air flows through the grooves 34b into the smoker's mouth and then flows simultaneously along through the grooves 34a into the tobacco rod 7 and the filter plug 6."

Corresponding wordings are also to be found in the same column, lines 27 to 29 and lines 56 to 60.

Nothing is said in the description of the exemplary embodiments to the effect that the air is the only fluid which flows in the grooves, and similarly it is not possible to infer from the description that this occurs only when the smoker draws normally on the cigarette, or what drawing normally is. The explanation for this is evidently that the statement of effect was not contained in the original application documents and was only introduced later into the patent claim and the description.

Evidence submitted:

Annex 3a: Photocopy of unalterable copy of the patent claims and description

This effect can be achieved only if the wrapping sheet 12 is impermeable to smoke, since only then is it impossible for any smoke to pass from the inside of the filter rod 2 through the wrapping sheet 12 into the groove. However, this is not indicated in Claim 1, where it is merely stated that the wrapping sheet is not "porous" - compare line 2 of the same claim - which is not the same thing as "impermeable to smoke".

In the claims and also in the description the terms "porous" and "perforation" are used in different senses. Porosities can be permeable to air and/or permeable to smoke. The effect which a porosity of this type has depends on its quality. The Defendant in this action for revocation has recognised that there are differences here, and has consequently, for example as in Claim 2 and Claim 8, drawn distinctions with the wording "not porous for smoke" on the one hand and "porous" on the other hand.

The characterisation selected in Claims 2 and 8

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for the wrapping sheet 12, according to which the latter is qualified as "not porous for smoke", is not disclosed in the description. Whereas in Claim 1 the expression "not porous" has evidently been assumed to mean "impermeable", a special qualification of the porosities is now introduced in Claim 2, a qualification moreover which finds no support in the description. Later in the same claim it is stated "that the wrapping sheet is impermeable to smoke". This again is nowhere indicated in the patent description. All that is stated there is that the wrapping sheet is not porous - compare, for example, page 3, left-hand column, line 30.

With regard to Claim 3, it must be noted that a tip material which is "permeable to air" is not disclosed in the description, nor is such a material "in sheet form" disclosed there.

In Claim 4 the term "airtight", which has not been disclosed in the description, is introduced, and it is stated there that the tip material is to be airtight and is to possess perforations. If perforations are equated with permeability to air, as occurs in Claim 1, then Claim 4 contains a contradiction.

In Claim 7 it is stated as the final characterising feature "that these two families of grooves (34a, 34b) are separated from one another as regards flow". This feature is assumed in the description of the statement of effect in connection with Figure 3, but not disclosed as such.

In Claim 8 the wrapping sheet is qualified as "not porous for smoke". As already mentioned above, this term is nowhere disclosed in the description.

If Claims 9 and 10 have any meaning, they derive as a matter of course from the wording of Claim 1 and contain no special characterisation. However, if it were conceivable for an embodiment in accordance with Claim 1 not to comply, as a matter of course, with the features according to Claims 9 and 10, then at any rate no such embodiment can be derived from any part of the patent specification.

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The stated object on page 2, right-hand column, lines 40 et seq. is incomprehensible. The Applicant departed from this incomprehensible statement of object in its German Patent Application P 30 11 959.6-23, running for the same period and based on the same priority, which led to Patent 3,011,959. The statement of object formulated there (page 2) reads:

"The object of the present invention is to design a cigarette filter of the type explained initially, in such a manner that, while the high level of reduction of undesirable substances and the good processability on conventional cigarette-making machines is retained, a cigarette with a more intensive tobacco flavour is obtained."

Evidence submitted:

Annex 4: Photocopy of description from Patent DE 30 11 959 dated 27th October 1982

The Patent Owner also caused this stated object to be expressed, not by chance, in the German application. In this connection, in fact, on page 10, lines 7 to 15, of its submission of 15th January 1982, the Patent Owner is represented as stating:

"that it is evidently crucial for the intended effect that pure streams of air be generated around the periphery of the filter body. Apparently, only these attain a sufficiently high rate of flow to produce a turbulent, whipping movement of the smoke emerging from the end surface of the filter body nearer the mouth, which movement propels the smoke to the organs of taste in the mouth."

Evidence submitted:

Annex 5: Photocopy of the submission by Dr. H. Kinkeldey, Patent Agent, of 15th January 1982 for Brown & Williamson to 10 W (pat) 88/81 (P 30 11 959.6.-23)

An invention does in fact also require a stated object, the indicated solution being linked to this object by a causal relationship, and this is lacking in the present patent.

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4. On the parallel German Patent 3,011,959

10. Under German patent law, the patentability necessary for the granting of a patent is evaluated in accordance with criteria very similar to those to be applied here. It is therefore worthwhile at this point to consider briefly the granting procedure for the parallel German Patent 30 11 959, which is based on the same convention priority and whose original documents are a translation of the same English-language original as used for the present patent.

First, the German patent was in the first instance rejected by the German Patent Office by an official decision of 31st July 1981. It was subsequently granted, on appeal by the Applicant, by the Federal Patent Court, according to a judgment of 27th October 1982.

Evidence submitted:

Annex 6: Official decision of the German Patent Office dated 31st July 1981 with reference to  
P 30 11 959.6-23

Annex 7: Decision of the Federal Patent Court on appeal by Applicant, dated 27th October 1982 with  
reference to Patent 30 11 959.6-23

An opposition was thereupon filed by a number of parties, including the Plaintiff in the present action of revocation, and the patent was then declared void by the Opposition Division according to official decision of 5th November 1984, against which an appeal by the Applicant is currently pending.

Evidence submitted:

Annex 8: Official decision of the German Patent Office dated 5th November 1984, with reference to  
Patent 30 11 959

In the decision to grant, German Auslegeschrift 2,107,850 (cf. Annex 7, page 7), which was cited in opposition, was evaluated in the following words:

"The skilled reader could thus derive from this printed publication the teaching that arrangements of grooves which are open or closed at the tip end or at the tobacco end are equally suitable for achieving the object

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stated therein (effective filtering and smoke dilution). He would also be reinforced in this interpretation by the fact that although, according to column 4, line 42, the dilution of the smoke takes place within the smoker's mouth, yet according to column 5, lines 33 to 35, by contrast, some of the air enters into the perforation (14 in Fig. 1) in the tube (3 in Fig. 1) and there mixes with the tobacco smoke - in other words, does so before entering the smoker's mouth. Thus, according to the state of the art, no special significance whatsoever has been attributed to the location in which air and tobacco smoke are brought together, whether inside or outside the filter."

The exceptionally favourable decision by the Federal Patent Court is thus based on an argument which, interestingly, coincides as to content with the feature which was admittedly added, as compared with the original patent claim, in the last three lines (left-hand column, lines 15-18) of Patent Claim 1 of Swiss Patent 645,252, but is not supported in the description of the exemplary embodiments (cf. above, pp. 9 et seq.).

The revocation of German Patent 30 11 959 by the German Patent Office on 5th November 1984 (Annex 8), which took place in the opposition proceedings, is based on German Offenlegungsschrift 2,849,904 (Philip Morris patent) which was cited there but was not a prior publication.

Evidence submitted:

Annex 9: German Offenlegungsschrift 2,849,904 dated  
23rd May 1979

11. This Philip Morris patent is to be evaluated as state of the art under German law, in contradistinction to Swiss law, where this German Offenlegungsschrift 2,849,904, and/or its Swiss parallel Application 11 762 178 (= +633,421), since it is not a prior publication, is not evaluated as state of the art. Nevertheless, what is defined in the published patent claims can, under the new Swiss Law (Article 7a, Patents Act), be destructive

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of the novelty of an invention of later priority (so-called prior claim approach). Since the essential intention here is to prohibit double patenting, the teaching is based on the assumption that only the published claims of Swiss patents are destructive of novelty (Official Gazette 1976 II 70; Pedrazzini, Patent- und Lizenzvertragsrecht [Law Relating to Patents and Licence Agreements], page 51). This is however of no significance, since a parallel patent to German Offenlegungsschrift 2,849,904, of identical content, exists in Switzerland, namely Swiss Patent 633,421.

Evidence submitted:

Annex 10: Swiss Patent 633,421 dated 15th December 1982

The Opposition Division needed to go no further than evaluating this single citation, as this single citation in itself sufficed to destroy the German patent completely (cf. Annex 8, page 4 et seq.).

Like the Swiss Philip Morris patent, German Offenlegungsschrift 2,849,904, cited in Germany, derives from a USA priority (US 843,146 of 18th November 1977), from which German Patent Application 2,858,154 also derives by division. This last-named patent application is a divisional application from German Patent Application P 2,849,904, and consequently contains no information which was not previously contained in German Offenlegungsschrift 2,849,904. On the basis of this divisional application, a Claim 1 was formulated which is identical with Patent Claim 1 of the German Brown & Williamson Patent 3,011,959. This Claim 1 of the German divisional application by Philip Morris was rejected by the German Patent Office in an official decision of 6th October 1983, the reason for the rejection being lack of inventiveness on the basis of German Auslegeschrift 1,936,429 and German Patent 1,657,261 and also U.S. Patent 1,718,122.

Evidence submitted:

Annex 11: German Patent Application P 2,858,154

Annex 12: Official decision rejecting German Patent

Application P 2,858,154 of 6th October 1983

The rejected Philip Morris Division Application

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P 2,858,154 derives from an earlier priority than Swiss Patent 645,252. If, according to the decision of the German Patent Office, Claim 1 of Division Application P 2,858,154 is not patentable due to lack of inventiveness, then this certainly applies to the identically worded Patent Claim 1 of the German Brown & Williamson Patent 3,011,959, which in fact has a later priority. These facts can logically be extended to the evaluation of the disputed Swiss Patent 645,252, which is essentially identical as to content with the parallel German Patent 3,011,959. The citations on which the official decision of 6th October 1983 (Annex 12), in the matter of the German Division Application P 2,858,154 is based, all form part of the state of the art under Swiss law. Detailed reference will be made to this in due course.

5. On Swiss Patent 633,421, which is destructive of novelty

12. The German Philip Morris Patent 2,849,904 (Annex 9), from which the abovementioned German Patent Application P 2,858,154 is a divisional application, of the same priority, corresponds - as already explained on page 15 above - to Swiss Patent 633,421. Although this patent is not a prior publication relative to the disputed Patent 645,252, its earlier application date means that it can destroy the novelty of the disputed patent if its claims are identical with those of the disputed patent. It is therefore necessary to examine whether the claims of the disputed Patent 645,252 coincide with the claims of the Philip Morris Patent 633,421. This leads us to consider again the features of the disputed patent as singled out on pages 6 et seq. above. For the sake of simplicity, the same subdivision is again used here. The detailed findings are as follows:

+645,252 (disputed patent)	+ 633,421 (Philip Morris patent)
a) a porous filter rod of cylindrical form	a) rod of smoking material having attached thereto a filter of lesser cross-sectional surface than that of the rod (Claim 1)

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- b) a non-porous wrapping sheet, which wraps the filter rod but leaves the ends thereof free.
- c) plurality of longitudinally extending grooves which extend from at least one end over a certain length of the wrapping sheet
- d) tip material which envelops the wrapping sheet, the said material being permeable to air, which makes it possible for ventilation air to flow through the tip material into the grooves
- e) air is the only fluid which flows through the grooves
- aa) grooves are open at one exit end
- bb) grooves do not extend over the entire length of the filter
- cc) tip material possesses perforations which are connected with the grooves for flow purposes
- b) filter is located in cylindrical aperture which passes axially through the tip made from material which is impermeable to smoke (Claim 4)
- c) tip possesses at least one separate ventilation passage in the longitudinal direction of the tip from the inlet to the exit end of the tip (Claim 6)
- d) tip possesses at least one air inlet in its outer wall (Claim 5). This air inlet may be a plug which is porous in the radial direction (Claim 7)
- e) ventilation passages serve to introduce air directly into the smoker's mouth (Claims 6 and 12)
- aa) ventilation passages terminate at the exit end of the tip (Claim 6)
- bb) air inlet is in the outer wall of the tip (Claim 5), which means that the ventilation passages do not extend over the entire length of the tip or of the filter
- cc) ventilation passages are connected with lateral air inlets for flow purposes (Claims 6 and 8)

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dd) tip material is permeable to air and preferably in sheet form	dd) tip material has lateral air inlets (Claims 6 and 8)
ee) grooves are arranged in a particular geometrical way	-----
ff) the wrapping sheet and the filter rod consist of a single piece	-----
gg) cigarettes fitted with a filter of this type	gg) cigarettes having such filters (Claims 1-7)

It is clear from this comparison that, with the exception of the particular geometrical arrangement of the grooves, all features of the disputed patent can be derived in their full extent and identically from the claims of the Philip Morris patent. All essential features of the disputed patent are thus contained in this citation. Hence the novelty of the disputed patent - with the exception of the particular geometrical arrangement of the ventilation passages - is destroyed. This is also clearly the case if the claims of the disputed patent are rewritten in the terminology of the Philip Morris patent, replacing the terms filter rod (2) by filter (12), wrapping sheet (12) by plug (13), groove (14) by passage (25), tip material (16) by paper (23) and cigarette rod (9) by rod (10). If this is done, the claims of the disputed patent read approximately as follows:

1. Cigarette which consists of a rod of smoking material and a cigarette filter attached thereto, characterised by a porous filter (12) of cylindrical form, a non-porous plug (13) which extends along the filter (12) and envelops the latter, but leaves the ends thereof open for a free flow, the plug (13) ... possessing a plurality of longitudinally extending, peripherally distributed, mutually spaced passages (25) by means of which the cross-sectional area of the filter is reduced to a cross-sectional area which is smaller than that of the rod of smoking material, and these passages (25), starting from at least one end, extend over a certain length, and

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further characterised by paper (23) which extends in the longitudinal direction and envelops the plug (13), this paper (23) possessing perforations (24) which enable the ventilation air to flow through the paper (23) into the passages (25), this air being the only fluid which flows through these passages (25) when a smoker draws normally on a cigarette fitted with this filter.

2. Cigarette according to Claim 1, characterised in that the plug (13) is non-porous for smoke, and that it (13), starting from one end, extends along the filter (12), and in that the passages (25), starting from at least one end, are open at this end and extend over a length which is less than the length of the filter (12), the part of the plug (13) possessing the passages (25) remaining impermeable to smoke, and in that the paper (23) possesses perforations (24) which are connected for flow purposes to the passages (25).

3. Cigarette according to Claim 1, characterised in that the paper (23) possesses perforations (24) and is preferably in sheet form.

4. Cigarette according to Claim 1, characterised in that the paper (23) is airtight and preferably in sheet form, and in that the paper (23) possesses predetermined perforations (24) which are connected for flow purposes with the passages (25).

5. Cigarette according to Claim 1, characterised in that the passages (25) are arranged at an angle relative to the longitudinal axis of the filter.

6. -----

7. -----

8. Cigarette according to Claim 1, characterised in that the plug (13) which is non-porous for smoke and the porous filter (12) consist of a single piece.

9. Cigarette according to Claim 1, characterised in ... that the filter (12) is connected for flow purposes with the rod (10).

10. Cigarette according to Claim 1, characterised in that ... the ... passages (25) of the plug (13) are connected for flow purposes with the smoker's mouth.

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Exactly the same claims can be derived from Swiss Patent 633,421 (Philip Morris patent), if they are restricted in the sense of the action for partial revocation according to Article 27 of the Patents Act. Such a restriction could be undertaken by the judge at any time, the patent being restricted to the abovementioned claims.

It would be difficult to demonstrate more clearly than is done by the above wording that the prior Philip Morris patent is catastrophically damaging to the novelty of the disputed patent. It essentially contains all features of Claims 1-5 and 8-10 of the patent in dispute, virtually verbatim. As if this were not sufficient, Figure 7 of the Philip Morris patent illustrates the mode of action of the disputed patent in virtually identical terms.

Claim 1 of the patent in dispute, as set out above, has admittedly been extended to include the statement that, owing to the passages, the cross-sectional area of the filter is reduced to an area which is smaller than that of the rod of smoking material. This added feature, which is to be found in Claim 1 of the Philip Morris patent, is however also present in the disputed patent, since the cross-sectional area of the filter element in that patent is reduced in comparison to the cross-sectional area of the tobacco rod by the presence of the grooves, being in fact reduced by the cross-section of the grooves. The content of the individual claims of the disputed patent - with the exception of Claims 6 and 7 - is thus virtually identical in wording with the claims of the Philip Morris patent. The disputed patent thus lacks novelty in the sense of Article 7a of the Patents Act.

6. On the level of inventiveness as compared with the state of the art

14. Even if one were to accept the presumption - at variance with the position in Germany - that the prior Philip Morris patent is not damaging to the novelty of the disputed patent, it would nevertheless be necessary to deny the validity of the latter since its content derives in

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an obvious manner from the state of the art (Article 1, Section 2, Patents Act).

The following are cited as state of the art:

Annex 13: German Auslegeschrift 1,936,429

Annex 14: U.S. Patent 3,490,461

Annex 15: German Patent 1,657,261

Annex 16: German Offenlegungsschrift 2,048,432

Annex 17: German Auslegeschrift 2,107,850

Annex 18: German Auslegeschrift 1,692,945

Annex 19: German Offenlegungsschrift 2,711,784

Annex 20: U.S. Patent 1,718,122

Annex 21: U.S. Patent 3,390,684

Annex 22: U.S. Patent 3,324,862

Annex 23: German Offenlegungsschrift 2,711,742

Annex 24: German Offenlegungsschrift 2,135,903

Evidence submitted: Annexes 13 - 24 as cited above.

15. In the treatment of the individual patent claims which follows, despite the contradictory wording "porous", permeable to air", etc., the said patent claims are deemed to have a content corresponding to the functional statement of effect subsequently added to Patent Claim 1 of Swiss Patent 645,252 - cf. lines 15 to 19 of that patent - since otherwise no comparative consideration is logically feasible.

a) Re Patent Claim 1

16. The novelty is destroyed by German Auslegeschrift 1,936,429 (Annex 13). In this German Auslegeschrift a cigarette filter rod is described. A cigarette filter produced from this cigarette filter rod is wrapped in a thin-walled outer plastic wrapper 12 (compare column 4, lines 44 and 45). The plastic wrapper 12 consists of polyethylene (compare Claim 12). Although it is not stated that the plastic wrapper 12 is impermeable to air, it is nevertheless known that polyethylene films are impermeable to air. The fact that the plastic wrapper 12 is in fact impermeable to air also emerges from the statements in column 5, lines 3 to 8. Otherwise, how else could the dilution air be supplied to the smoker's mouth separately from the stream of smoke, as is there stated?

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The filter according to Figure 3 is filled with filter material over its entire length, as is evident from the production method indicated according to Figure 1. In column 4 below, reference is expressly made to Figure 3 of U.S. Patent Application 632,336. This U.S. patent application resulted in U.S. Patent 3,490,461 (Annex 14) to which German Patent 1,657,261 (Annex 15) corresponds.

The reader of German Auslegeschrift 1,936,429 (Annex 13) is thus also asked to take into consideration U.S. Patent Application 632,336 (Annex 14) or, which is the same thing in terms of content, German Patent 1,657,261 (Annex 15). If he complies with this suggestion, then he arrives at the subject of the application, if in fact, in accordance with this suggestion, he exchanges the tip 18 in Figure 1 of 1,657,261 (Annex 15) for a filter rod section from 1,936,429 (Annex 13), Figure 3, and in doing so makes the seal 31 from 1,657,261 (Annex 15). The result thus obtained - the separation of the main flow of smoke from the ventilation air - is indicated in German Auslegeschrift 1,936,429 (Annex 13) in direct association with the request - compare column 5, lines 3 to 8, in that reference.

17. German Offenlegungsschrift 2,048,432 (Annex 16) shows under Figs. 1 and 2 a filter cigarette having a cigarette filter 20, which possesses axially extending grooves 27 and 29 on the periphery, these grooves being closed at the tobacco rod end and open at the mouth end, as a result of which the smoke is constrained "without passing through the actual filter, to flow through the peripheral longitudinal passages 27 and 29 thereof" (cf. page 8 of the Offenlegungsschrift, lines 2-4). The outer passages 29, which are restricted internally by the central element 25 and externally by the outer element 23, convey ventilation air, if the outer element (as indicated on page 5, 1st paragraph) is permeable to air. As regards the inner element 24, it is stated that it is permeable to air. As regards the middle element 25, it is stated at the bottom of page 8, that it is intended to be

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impermeable to air. This also corresponds to the conclusion in the last subordinate clause of Claim 1 of the disputed Patent 645,252. On page 8, 2nd paragraph of German Offenlegungsschrift 2,048,432 (Annex 16) it is stated that the central element is preferably an injection-moulded plastic component and that this is impermeable to air. That this is the case, and is intended to be the case, is evident from the conclusion at the end of the 2nd paragraph of page 8, where it is stated "that the secondary air, - by which is meant the ventilation air drawn in through passages 29 - can be guided parallel to the principal stream of smoke, but without mixing with the latter".

The central element 5 corresponds to the wrapping sheet 12 from Patent Claim 1 of the disputed Patent 645,252, having the same aerodynamic consequences for the action of the grooves. The granted Claim 1 is hence anticipated in a manner detrimental to novelty.

18. According to German Auslegeschrift 2,107,850 (Annex 17), in the area of the grooves, which is all that matters, the material is shown in Figure 5 as being compressed at the periphery, if the filter tip is produced in the manner indicated in column 6, lines 25 to 54, of this German Auslegeschrift. In this production method the filter material, which has occupied in the blank the space later to be occupied by the grooves, has to be pressed into the surface which is thus compressed. The more densely the filter material is compressed, the less permeable it is to air.

In this context reference is again made to German Auslegeschrift 1,692,945, which discloses, in column 4, lines 41 to 47 (Annex 18) that, in the case of a filter, the surface can be sealed by sintering to form a dense skin. This is mentioned only to illustrate the result which the average expert could expect on reading column 6, lines 25 to 54.

Similar information is also obtained from German Offenlegungsschrift 2,711,784, page 13, 3rd paragraph (Annex 19). There it is stated that, with the process

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technology in question, it is even possible to achieve superficial, complete sealing.

Absolute impermeability to air in the sense of a vacuum seal can perhaps not be achieved by the method of German Auslegeschrift 2,107,850 (Annex 17), but a seal of this type is in fact probably also not implied in Swiss Patent 645,252 - all that can be meant is relative impermeability to air. That this is so is evident merely from the description of the exemplary embodiments, according to which the impermeability to air is achieved by means of a covering sheet which consists conventionally of paper and inevitably possesses a certain residual porosity. As regards the quality of the relative impermeability to air, all that can be inferred from the subsequently introduced feature of the claim is that the residual permeability to air of a covering sheet is intended to be substantially less than the permeability to air of the perforations 38 in the tip sheet 36.

If the perforations visible in Figures 1 and 2 of German Auslegeschrift 2,107,850 (Annex 17) are now related to the seals resulting if the filter tip according to Figure 5 is produced in accordance with column 6, lines 5 to 54, the result is identity of characterisation and hence anticipation injurious to novelty.

The relativistic consideration in connection with the impermeability to air is also justified because the effect allegedly produced by the separation of ventilation air and main-stream smoke, if it should in fact occur, is also to be expected with minimum permeability to air of the peripheral surface.

Nowhere in Swiss Patent Specification 645,252 is it stated, nor could it be inferred, why a special effect achieved by means of this separation occurs only when the air seal is a total seal. If however relative separation leads to an advantageous effect (which in fact is still disputed), the extent of that effect is dependent on the quality of the impermeability to air. Then, however, it is obvious to improve this impermeability to air if it is desired to intensify the effect, particularly

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since the gas-tight separation of air and tobacco smoke is previously known from German Patent 1,657,261 (Annex 15).

19. U.S. Patent 1,718,122 (Annex 20) shows ventilation passages 7, which are open towards the mouth end and are closed off from the main-stream smoke by the cigarette paper. In this case again the impermeability to air is only relative, in which connection reference is made to the remarks made above. The cigarette paper must be relatively impermeable to air, otherwise the cigarette would not draw. It is a fact, at any rate, that in this cigarette the ventilation air passes into the smoker's mouth separately from the main-stream smoke and cannot become mixed at an earlier stage. In fact the tip - that is to say, the region wrapped by the covering paper 8, is filled with tobacco fibres. These tobacco fibres in the tip, however, are not intended to be smoked, since the strong covering paper is unsmokable. Rather, the tobacco fibres in the tip serve the same purpose as the filter in the granted patent claim, namely to filter the main-stream smoke. Nothing in Swiss Patent 645,252 excludes the use of tobacco fibres as filter material in the tip. Nor is it possible to discern how anything at all could change in the action asserted by the Patent Owner if the tip is filled with acetate filter material or with tobacco fibres. This U.S. patent specification, too, anticipates Claim 1 of the disputed patent in a manner injurious to novelty.
20. U.S. Patent 3,390,684 (Annex 21) shows a ventilation passage terminating at the mouth end, which guides ventilation air to the smoker's mouth separately from main-stream smoke. The secondary air passage according to Figures 5, 6 and 7, previously disclosed by this U.S. Patent, is compressible and is intended to be compressed by the smoker when the smoker wishes to shut off the ventilation air. This, however, only makes sense provided that it is impossible, when the passage is compressed, for ventilation air to flow in anyhow at the aperture 32, pass through the covering sheet 12 and into the tip and reach the

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smoker's mouth from there. Another reason why this cannot occur is that the passage according to Figure 7 is lined on the inside by the covering sheet 12, which must necessarily, as stated above, have a sufficient relative impermeability to air for the cigarette to function. But, if this is the case, the average expert will be unlikely to think, on reading this patent specification, that the tube 41 could have walls which are permeable to air. The fact that the tube 41 is to be designed, in this case, so as to be impermeable to air is not indicated in the patent specification because it is an absolute matter of course for the reader.

Anything which is achieved in the way of flow effects by means of one groove is merely multiplied when a plurality of grooves are arranged to be distributed over the periphery. No difference justifying the grant of a patent can be found in this.

21. U.S. Patent 3,324,862 (Annex 22) possesses grooves 34, 35 in the filter tip 33 - cf. Figures 5 and 6 - which communicate via perforations 37 with the outside air. This is intended to result in ventilation air passing into the smoker's mouth, as is stated in column 1, lines 50 and 51. The same purpose is served by the tubes according to Figure 1, which according to column 2, lines 28 and 29, can consist of paper, and consequently relatively airtight and seal off the inside of the tubes from the filter. To seal off the grooves according to Figure 5 from the filter in a corresponding manner is no invention, anymore than is the complete separation of the tubes from the tobacco smoke, as is realised according to Figures 3 and 4.
22. Claim 1 of the contested Swiss patent contains nothing which could justify patentability in respect of the citations.
  - b) Re Patent Claim 2
23. Claim 2 is anticipated, for example, by German Patent 1,657,261 (Annex 15). In that patent the part 18 corresponding to the wrapping sheet 12 is not porous. The grooves start from one end, namely the mouth end, and are

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open at this end, extending only over part of the length of the filter rod, and perforations 28 are provided which terminate in the grooves 22.

c) Re Patent Claim 3

24. Claim 3 is anticipated, for example, by German Patent 1,657,261 (Annex 15). According to German Patent 1,657,261 the wrapping sheet 24 corresponding to the tip material is porous - cf. column 5, line 9 - and, as the expression wrapping sheet implies, is in sheet form.

d) Re Patent Claim 4

25. Claim 4 is anticipated, for example, by U.S. Patent 3,390,684 (Annex 21). The wrapping sheet 13 according to Figure 7, corresponding to the tip material, has necessarily to be relatively airtight, since otherwise the intended effect of shutting off the ventilation air would be impossible to achieve. In Figures 8 and 9 a perforation 43 is visible.

e) Re Patent Claim 5

26. Claim 5 is anticipated, for example, by German Patent 1,657,261 (Annex 15), Figure 2, which shows helically wound grooves 131.

f) Re Patent Claim 6

27. Claim 6 is anticipated, for example, by German Offenlegungsschrift 2,711,742 (Annex 23), in which an annular channel 9 - cf. fourth page of description, penultimate paragraph - is provided which corresponds to the groove 26. A longitudinally extending, helical channel 7 (cf. the sentence of the description already referred to) starts from this annular channel 9.

g) Re Patent Claim 7

28. Claim 7 is anticipated, for example, by German Offenlegungsschrift 2,135,903 (Annex 24), in which Figure 3 shows channels 10 and 12 corresponding to the grooves, these channels starting from different ends of the filter and being separated from one another as regards flow.

h) Re Patent Claim 8

29. Claim 8 is anticipated, for example, by German Auslegungsschrift 2,107,850 (Annex 17) Figure 5 in connection with the sealing method described in column 6 and already

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dealt with above in relation with Claim 1.

i) Re Patent Claim 9

30. Claim 9 is anticipated, for example, by U.S. Patent 3,324,862 (Annex 22) - cf. Figures 1 and 5 of this citation - according to which the passages formed by the grooves terminate at the cigarette rod.

k) Re Patent Claim 10

31. Claim 10 is anticipated, for example, by German Patent 1,657,261 (Annex 15) Figure 1, in which the channels 22 corresponding to the grooves terminate at the mouth end.
32. Since, as set out above, Claim 1 is anticipated in a manner injurious to novelty, the subsequent claims likewise present no additional new features which, in view of the demonstrated state of the art, could justify the patent if its scope were to be restricted.

7. Legal basis

33. A precondition for the validity of the patent is, in particular, the novelty of the patent and adequate level of inventiveness of the technical teaching claimed, the revised Patents Act of 17th December 1976 being fully applicable to the patent in dispute, which was not applied for until 1980. The priority date 11th April 1979 is decisive for the evaluation of novelty and inventiveness.

On the one hand, the Plaintiff asserts that the older Philip Morris Patent +633,421, though not a prior publication, destroys the novelty of the patent in dispute, since all the features thereof, with the possible exception of Claims 6 and 7, are anticipated in an identical manner (Article 7a, Patents Act).

Moreover, the teaching of the patent in dispute is derived in an obvious manner from the state of the art, the invention on which the disputed patent is based representing no advance, or at least no important advance, over what can already be inferred from the individual prior publications cited (Article 1, Section 2, Article 7, Patents Act).

In summary it may be said that the technical teaching disclosed and claimed in the disputed patent has been anticipated in its entirety. Swiss Patent

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645,252 is therefore entirely invalid due to lack of patentability (Article 1, in conjunction with Article 26, Clause 1, Patents Act). The Plaintiff, being a competitor of the Defendant, has a substantial interest in seeing his patent declared invalid.

34. Since the Defendant has energetically defended himself in Germany against the revocation of his patent (cf. above, pages 13 et seq.), it cannot be assumed that the said Defendant will voluntarily agree to the cancellation of its parallel Swiss patent. For this reason no prior request was made to the Defendant to cancel its patent, and the action for revocation was initiated without previous notice.

On the basis of these remarks, I respectfully request you to approve this action in accordance with the petition, with the customary consequences.

Your obedient servant

(illegible signature)

Dr. Lucas David

Recorded delivery in quadruplicate

Enclosures according to separate list

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